

### REMARKS

This Amendment is responsive to the Office Action identified above, and in any other manner indicated below.

### NON-ENTRY OF INFORMATION DISCLOSURE STATEMENT - TRAVERSED

Applicant's previously-submitted list of prior art references cited in the specification has been refused entry, apparently on a basis that Applicant utilized a listing/format other than a Form PTO-1449 to list references. **Strong traversal is appropriate as there is no basis for denying entry.** More particularly, MPEP 609 states "Applicants are **encouraged** to use the USPTO forms when preparing an information disclosure statement." The term "**encouraged**" does not mean "**mandatory**", and **there is no authorization within the MPEP or elsewhere for denying entry** when a different (*i.e.*, non-1449) type of listing/format is used. For convenience, submitted herewith is another copy of Applicant's previously-filed listing, and **Applicant respectfully requests return of an Examiner-initialed copy indicating that the information (*i.e.*, references) has been considered and will appear on the printed face of any patent issuing hereon.** Applicant respectfully thanks the Examiner in advance for such initialing/consideration.

### DRAWING OBJECTIONS - TRAVERSED AS NOT "PRIOR ART"

The section numbered 7 on page 3 of the Office Action objects to the drawings and alleges that certain ones of Applicant's FIGS. should be labeled as "Prior Art." **Traversal is appropriate, because such figures are not published prior art, and Applicant does not want to make any admissions as to prior art.** More

particularly, as a first failure, the cited "page 29, lines 19-20" text of Applicant's specification only concerns FIG. 20, and not all of FIGS. 20-22. More importantly, the phrase "already known" is not an admission that FIG. 20 was admitted prior art for the purposes of §§102/103 art, but instead, an indication that the FIG. 20 arrangement was known to Applicant (not the general public).

If the objection is maintained in any next Action, Applicant respectfully requests that the Examiner cite prior art references to meet his/her burden to show that such FIGS. 20-22 definitively are "Prior Art." Based upon the foregoing, reconsideration and withdrawal of the above-referenced objection to the drawings are respectfully requested. If FIG. labeling becomes the only issue barring allowance of the application, the Examiner is invited to call the undersigned at the local Washington, D.C. number of 703-312-6600 in order to discuss the same.

#### **DRAWING OBJECTIONS/SPECIFICATION ADJUSTED**

With regard to the section numbered 8 on page 3 of the Office Action, appropriate locations of Applicant's specification have been amended to include mention of the previously-unmentioned reference numerals. As the following is believed to obviate all the listed concerns, reconsideration and withdrawal of the objection to the drawings are respectfully requested.

#### **ABSTRACT OBJECTION - REPLACEMENT ABSTRACT SHEET**

The Abstract was objected to because of the Office Action concerns listed within the sections numbered 9 and 10 on page 4 of the Office Action. As the attached replacement Abstract is believed to be of proper form, reconsideration and

withdrawal of the objection to the abstract, are respectfully requested. In the event that the present replacement Abstract is itself found not to be of proper form, the Examiner is herein authorized to amend to a suitable replacement Abstract. With respect to any past, present or any ultimately implemented Abstract or amendment thereof, Applicant would like to reiterate and embrace the §1.72(b) provisions that "The abstract will not be used for interpreting the scope of the claims."

### **PENDING CLAIMS**

Claims 1-20 were pending, under consideration and subjected to examination in the Office Action. Appropriate claims have been amended, cancelled and/or added (without prejudice or disclaimer) in order to adjust a clarity and/or focus of Applicant's claimed invention. That is, such changes are unrelated to any prior art or scope adjustment and are simply refocused claims in which Applicant is presently interested. At entry of this paper, Claims 1-12, 15-17, 19 and 21-22 will be pending for further consideration and examination in the application.

### **REJECTION UNDER 35 USC '102**

All 35 USC §102 rejections based upon the Miyauchi *et al.* (US 2001/0021089 A1) and Fontana, Jr. *et al.* (US 5,729,410 A) are respectfully traversed. Such rejections have been rendered obsolete by the present clarifying amendments to Applicant's claims, and accordingly, traversal arguments are not appropriate at this time. However, Applicant respectfully submits the following to preclude renewal of any such rejections against Applicant's clarified claims.

All descriptions of Applicant's disclosed and claimed invention, and all descriptions and rebuttal arguments regarding the applied prior art, as previously submitted by Applicant in any form, are repeated and incorporated herein by reference. Further, all Office Action statements regarding the prior art rejections are respectfully traversed. As additional arguments, Applicant respectfully submits the following.

Unrelated to any prior art rejection, ones of the rejected claims have now been cancelled without prejudice or disclaimer, thus rendering this rejection of such claims obsolete at this time. Patentability of remaining ones of the rejected claims are supported as follows.

In order to properly support a §102 anticipatory-type rejection, any applied art reference must disclose each and every limitation of any rejected claim. The applied art does not adequately support a §102 anticipatory-type rejection because, at minimum, such applied art does not disclose (or suggest) the following discussed limitations of Applicant's claims.

Some important features of Applicant's invention are that:

1) the magnetic domain control layer is consistent with a material which is a granular layer made by mixing a hard magnetic material (Co, Cr, Pt, Ta and Nb) and an insulating material (Al<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub>, HfO<sub>2</sub>, TaO<sub>2</sub>, TiO<sub>2</sub>, Ta<sub>2</sub>O<sub>5</sub> AISIN and ZrO<sub>2</sub>);  
and

2) the magnetic domain control layer is comprised of a layer made of a soft magnetic oxide material having high electric resistivity disposed in contact with opposite ends of the magnetoresistive sensor layer, and a hard magnetic layer (Co, Cr, Pt, Ta and Nb) disposed outside the same.

Both Miyauchi *et al.* and Fontana, Jr. *et al.* fail to show the magnetic domain control layer which is consistent with the granular layer, or comprising a layer made of a soft magnetic oxide material and a hard magnetic layer.

As a result of all of the foregoing, it is respectfully submitted that the applied art would not support a §102 anticipatory-type rejection of Applicant's claims. Accordingly, reconsideration and withdrawal of such §102 rejection, and express written allowance of all of the §102 rejected claims, are respectfully requested.

**CONSIDERATION OF WITHDRAWN CLAIMS -  
REASONABLE NUMBER OF SPECIES, WITH GENERIC CLAIM**

As traversal, 37 CFR §1.141 provides that more than one species of an invention, not to exceed a reasonable number, may be specifically claimed in different claims in one application provided that the application also include an allowable claim generic to all of the claimed species and all claims to the species in excess of one are written in dependent form or otherwise include the limitations of an allowable generic claim. Since Applicant believes that Claim 1 is allowable and is generic to all of Claims 2-6 and 17 depending therefrom (*i.e.*, such claims contain the limitations of such generic claim by dependency), Applicant respectfully submits that the election of species requirement should be withdrawn with respect to such claims, and that such claims should also be considered and allowed.

**DOUBLE PATENTING REJECTION - REJECTED CLAIM CANCELLED**

The double patenting rejection of Claim 18 as set forth within the section numbered "15" on page 8 of the Office Action, is respectfully traversed. However, in

view of the present cancellation of Claim 18 without prejudice or disclaimer, such rejection has presently been rendered obsolete, and accordingly, traversal arguments are not appropriate at this time. As a result of the foregoing, reconsideration and withdrawal of the double patenting rejection are respectfully requested.

#### **RESTRICTION REQUIREMENT - TRAVERSED/MOOT**

A restriction/election requirement has been made for the reasons beginning on page 2 of the Office Action. However, Applicant respectfully submits that the restriction requirement has been rendered moot (*i.e.*, obsolete) by the addition of linking claim 20 submitted herewith. That is, both independent Claims 1 and 19 contain linking Claim 20's limitations of a magnetoresistive sensor layer, and a magnetic domain control layer having a specific resistance of not less than 10mΩcm.

Further, it is respectfully noted that Claims 1-17 do not have magnetic disk apparatus features/limitations, *i.e.*, only dependent Claim 18 (which is cancelled herein) has such features/limitations.

#### **RELATED INVENTIONS - NO SERIOUS BURDEN FOR EXAMINATION**

As traversal, presuming *arguendo* that one could establish that the subject matter recited in the claims in issue relating to the respective embodiments of the present invention relate to independent and distinct inventions as required by 35 USC §121, as pointed out in §803 of the Manual of Patent Examining Procedure, if a search and an examination of an entire application can be made without serious

burden, the Examiner must examine the application on the merits even though the application includes claims to distinct or independent inventions.

### **PROVISIONAL ELECTION**

In order to comply with the election of species requirement, Applicant provisionally elects, with traverse, for prosecution on the merits, Group I, including at least Claims 1-18 and linking Claim 20.

### **RESERVATION OF RIGHTS**

It is respectfully submitted that any and all claim amendments and/or cancellations submitted within this paper and throughout prosecution of the present application are without prejudice or disclaimer. That is, any above statements, or any present amendment or cancellation of claims (all made without prejudice or disclaimer), should not be taken as an indication or admission that any objection/rejection was valid, or as a disclaimer of any scope or subject matter. Applicant respectfully reserves all rights to file subsequent related application(s) (including reissue applications) directed to any/all previously claimed limitations/features which have been subsequently amended or cancelled, or to any/all limitations/features not yet claimed, *i.e.*, Applicant continues (indefinitely) to maintain no intention or desire to dedicate or surrender any limitations/features of subject matter of the present application to the public.

### EXAMINER INVITED TO TELEPHONE

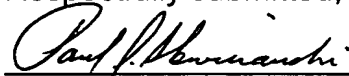
The Examiner is invited to telephone the undersigned at the local D.C. area number of 703-312-6600, to discuss an Examiner's Amendment or other suggested action for accelerating prosecution and moving the present application to allowance.

### CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims listed above application are now in condition for allowance. Accordingly, early allowance of such claims is respectfully requested.

A Petition for an appropriate extension of the shortened statutory period for response set by the Office Action mailed 5 September 2003 is submitted herewith. To whatever other extent is actually required, Applicant petitions for an extension of time under 37 CFR §1.136. Also submitted is a Form PTO-2038 authorizing payment of the requisite Petition and additional claim fees. Please charge any shortage in the fees due in connection with the filing of this paper to Deposit Account No. 01-2135 (referencing case No. 520.39871X00).

Respectfully submitted,



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### ATTACHMENTS:

Copy of List of Prior Art References  
Petition for Extension of Time  
Form PTO-2038 (Fee Codes 1201/1251)



For: The Patent Application

Our Ref.: NT0318US

☆List OF THE PRIOR ART REFERENCES CITED  
IN THE SPECIFICATION

1. JAPANESE Laid-open No. Hei 4 (92) - 358310
2. JAPANESE Laid-open No. Hei 9 (97) - 282618
3. JAPANESE Laid-open No. Hei 5 (93) - 266437